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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,158	11/16/2001	Kenneth B. Higgins	5113D	1180

7590 02/24/2006
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EXAMINER

JUSKA, CHERYL ANN

ART UNIT PAPER NUMBER

1771

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,158

Applicant(s)

HIGGINS ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35, 38, 40-49, 58-72, 77-79, 81-85, 88-97, 99, 100, 102-128, 130, 131, 134-136, 138, 141, and 151 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-35,38,40-49,58-72,77-79,81-85,88-97,99,100,102-128,130,131,134-136,138,141 and 151.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed November 28, 2005, has been entered. Claims 1-3, 14, 22-24, 26, 41, 42, 49, 58, 65, 66, 81-84, 88-90, 93-95, 97, 99, 102, 105-108, 111-113, 115, 117, 118, 123, 130, 131, 134-136, 138, 141, and 151 have been amended as requested. Claims 36, 37, 39, 50-57, 73-76, 80, 86, 87, 98, 101, 129, 132, 133, 137, 139, 140, and 142-150 have been cancelled. Thus, the pending claims are 1-35, 38, 40-49, 58-72, 77-79, 81-85, 88-97, 99, 100, 102-128, 130, 131, 134-136, 138, 141, and 151.

2. Said amendment is sufficient to withdraw the 102 rejection set forth in section 10 of the last Office Action since the claims have been amended to limit the foam cushion layer to rebond foam. Miller (US 2002/0034606) fails to teach rebond foam cushion layers. Additionally, said amendment is sufficient to withdraw the 103 rejection of claim 1 and its dependent claims as set forth in section 5 of the last Office Action since claim 1 has been amended to limit the rebond foam cushion to have a flame laminated junction adjacent one of the other claimed layers. Higgins and DeSimone fail to teach flame laminated junctions. Additionally, the rejections of independent claims 41 and 58 are withdrawn due to the amendment and to the implied structure given to the limitation that the layers are flame laminated together. Furthermore, the rejections set forth in section 6-9 of the last Office Action are also hereby withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 88, 123, 130, 134, 136, 138, and 141 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Said claims are indefinite because it is unclear what the flame laminated backing composite (FLBC) comprises other than the claimed rebond or foam particles. In other words, how is said rebond or foam layer a composite backing? Additionally, what layers are flame laminated together?

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 88-97, 99, 100, 102-128, 130, 131, 134-136, 138, and 141 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to Higgins in view of US 5,610,207 issued to DeSimone as set forth in section 5 of the last Office Action.

The amendments to independent claims 88, 123, 130, 134, 136, 138, and 141 are insufficient to overcome said rejection since said amendments merely change “flame laminate layer” to “flame laminate backing composite including a layer.” Since no other component of said backing composite is claimed besides the previously claimed layer, no new structure is really added to the claim. Additionally, since the claims do not specify what layers or components are flame laminated together, the limitation is not given patentable weight at this time. Therefore, said rejection is maintained.

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8. Claims 1-4, 7-17, 19-25, 27-35, 40-42, 44-48, and 151 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to Higgins in view of US 5,610,207 issued to DeSimone and in further view of W. Fung, *Coated and Laminated Textiles*, Chapter 3.16, "Flame Lamination," pages 119-122.

While Higgins and DeSimone fail to explicitly teach flame lamination of the cushion layer or rebond foam layer, it would have been readily obvious to one of ordinary skill in the art to bond the rebond foam cushion layer to the reinforcing or backing material layer via flame lamination. Specifically, flame lamination is a well known method of a foam layer to a fabric layer to form laminates. For example, Fung teaches flame lamination is quick and economical in that it employs the foam itself as adhesive to bond said foam to a fabric (Fung, paragraph spanning pages 119-120). Thus, it would have been readily obvious to one of ordinary skill in the art to form the carpet according to Higgins and DeSimone by flame lamination of the foam cushion layer to the other layers. Motivation to do so would be the well known advantages of flame lamination, such as less expensive and quick. Therefore, said claims are rejected as being obvious over the cited prior art.

9. Claims 5, 18, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to Higgins in view of US 5,610,207 issued to DeSimone and in further view of W. Fung, *Coated and Laminated Textiles*, Chapter 3.16, "Flame Lamination," pages 119-122, as applied to claims 1 and 41 above and in further view of EP 048 986 issued to Dow for the reasons of record. [Note section 8 of the Office Action mailed October 8, 2003.]

10. Claims 6, 26, 38, 49, 58-60, 62-67, 69-72, 77-79, and 81-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to Higgins in view of US 5,610,207

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issued to DeSimone and in further view of W. Fung, *Coated and Laminated Textiles*, Chapter 3.16, "Flame Lamination," pages 119-122, and in further view of US 5,540,968 issued to Higgins for the reasons of record. [Note section 9 of the Office Action mailed October 8, 2003.]

11. Claims 61 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to Higgins, US 5,610,207 issued to DeSimone, W. Fung, *Coated and Laminated Textiles*, Chapter 3.16, "Flame Lamination," pages 119-122, and US 5,540,968 issued to Higgins, as applied to claim 58 above and in further view of US 5,616,200 issued to Hamilton for the reasons of record. [Note section 10 of the Office Action mailed October 8, 2003.]

Response to Arguments

12. Applicant's arguments filed with the amendment have been fully considered but they are not persuasive.

13. Applicant traverses the above rejections by arguing that DeSimone is not directed to carpet tile or even attached cushion broadloom carpet, but rather to a foam pad for carpeting (Amendment, paragraph spanning pages 18-19 and page 19, 1st paragraph). In response, the examiner respectfully disagrees. Specifically, DeSimone teaches a rebond polyurethane foam product which is suited for a carpet backing (abstract and col. 2, lines 34-45). DeSimone employs the term "carpet backing" rather than carpet pad, underlay, or other common term used to describe a non-attached foam layer for placement under an installed carpet. As such, the examiner believes the DeSimone reference clearly teaches one skilled in the art that the rebond foam is suited for attachment as a carpet backing layer.

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14. Regarding applicant's arguments that changes to a dimensionally stable carpet tile are viewed with skepticism (Amendment, page 19, 2nd paragraph), it is argued that the layers of a carpet tile in question (i.e., primary carpet face, adhesive, and cushion back) are not necessarily the layers instrumental to dimensional stability. Specifically, the face is intended to be decorative and aesthetically pleasing, while appearing durable to wear. The main function of a polyurethane foam layer is to provide a resilient cushion backing for comfort upon use. The adhesive layer is employed to bind the face yarns and to adhere the cushion back to the primary carpet face. Hence, none of the layers contribute significantly to obtaining a dimensional stable carpet tile and changes thereto need not be devastating to the stability of said carpet tile as asserted by applicant (Amendment, paragraph spanning pages 19-20). In carpet tiles, this function is largely obtained by the use of a stabilizing or reinforcement layer such as a fiber glass scrim. Note Higgins '857 col. 1, lines 48-55 and Higgins '968 col. 3, line 64 - col. 4, line 7.

15. Applicant also argues that one skilled in the art would not remove one of the two stabilizing layers of Higgins '857 (Amendment, paragraph spanning pages 19-20). In response, it is first noted that the reinforcement layer 158 of Higgins '968 corresponds to the carrier layer 26 of Higgins '857. Secondly, Higgins '968 explicitly states "the reinforcement material 158 may be left completely out of the process" (col. 6, lines 43-49). Thus, applicant's argument is found unpersuasive.

16. With respect to applicant's assertion of the "preponderance of evidence" that outweighs a conclusion of obviousness (Amendment, page 20-22), it is asserted, as explained above, that applicant has not provided said "preponderance of evidence" outweighing said conclusion of

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obviousness. The cited prior art suggests the invention as presently claimed. Additionally, the Norton declaration has not been found persuasive of non-obviousness for the following reasons.

17. It is first noted that the Norton Declaration does not present any quantitative data showing unexpected results, but merely reiterates that the accepted wisdom in the art was that rebond foam was not suited for carpet tiles. Secondly, the examiner respectfully disagrees that the Norton Declaration is sufficient to show nonobviousness. Indeed, MPEP 2145 states that proceeding contrary to accepted wisdom in the art is evidence of nonobviousness. In particular, *In re Hedges*, 228 USPQ 685 held that the “PTO acted erroneously in determining that claimed process for sulfonating diphenol sulfone at its molten state would be obvious from prior art, *since* references all suggest that lower temperatures are preferable, and *none suggests that reaction may be advantageously produced at molten state*, and *since data produced by inventor*, and not challenged by PTO, *show significant advantages of claimed invention*, so that, on balance, inventor proceeded contrary to accepted wisdom, which is strong evidence of unobviousness.” [Emphasis added.] Additionally, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, states “On the entire record and in view of all the references, each in its entirety, it is clear that a person of ordinary skill confronted with a PTFE tape breakage problem would have either slowed the rate of stretching or increased the temperature to decrease the crystallinity. Dr. Gore did neither. He proceeded contrary to the accepted wisdom of the prior art by dramatically increasing the rate and length of stretch *and* retaining crystallinity. That fact is strong evidence of nonobviousness.”

18. The differences between the *Hedges* and *Gore* situations and the present invention are (1) the present prior art of record (i.e., DeSimone) explicitly teaches rebond foam employed as a

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carpet backing and (2) both the *Hedges* and *Gore* cases showed advantageous results were achieved when proceeding contrary to the accepted wisdom. Proceeding contrary to the accepted wisdom in the art is not sufficient to show nonobviousness—especially when the prior art has an explicit teaching thereto. However, the successful results achieved *are what is contrary* to the accepted wisdom. One skilled in the art would expect rebond foam to produce a commercially unsuccessful carpet tile due to the lack of uniformity in thickness and density. This is the accepted wisdom in the art. But, *proceeding contrary* to the accepted wisdom *to achieve advantageous or unexpected results* is evidence of nonobviousness. Thus, applicant is requested to provide sufficient evidence of said advantageous results as described in the last Office Action.

19. It is recommended that applicant submit a signed declaration describing in detail the construction of each carpet tile (e.g., face yarn composition and denier, face weight, thickness, and density, primary backing construction and weight, pre-coat layer composition and weight, hot melt composition and weight, reinforcement layer construction and weight, foam cushion back composition, weight, thickness, and density, and backing layer construction and weight). Said declaration should also include the results of performance tests that reflect the cushion layer of the carpet tile (e.g., cushion resilience, Herzog walking comfort rating, castor chair test, Gmax, etc.). It is noted that the scope of said declaration would establish the scope of allowable subject matter. For example, if the two carpet tiles are equivalent in all aspects except the foam composition (i.e., thickness and density of foam are alike), then the allowable subject matter would be a carpet tile having a rebond foam backing. However, say the two carpet tiles differ with respect to the foam layer composition and average foam density, then the scope of the

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allowable subject matter would be a carpet tile having the rebond foam layer and a specified foam density.

20. With the present amendment, applicant submits “a sample of a commercial carpet tile representative of copying by others” (Amendment, page 22, 2nd paragraph). Said sample is “a rebond foam backed carpet tile made and sold in 2004 in Europe by a competitor of Milliken & Company” (Amendment, page 22, 2nd paragraph). “Applicants respectfully believe this to be sufficient evidence of copying by others which is one of the nonobviousness and patentability factors to be considered.” (Amendment, page 22, 2nd paragraph). The examiner respectfully disagrees. First, the sample is not labeled or documented in any way as to the carpet construction and source thereof. Said sample is merely labeled with the present application number. Secondly, without details of the construction of said carpet sample, the examiner cannot possibly verify it as “copying” of the present invention. The Patent Office does not have the capability for analysis of samples. Thirdly, with respect to applicant’s evidence of copying, more than the mere fact of copying is necessary to make that action significant because copying may be attributable to other factors (see MPEP 716.06). Alleged copying is not persuasive of nonobviousness when the other manufacturer had not expended great effort to develop its own solution. *Pentec, Inc. v. Graphic Controls Corp.*, 227 USPQ 766. Therefore, applicant’s submission of a sample of “copying” is not found persuasive and the above rejections are maintained.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

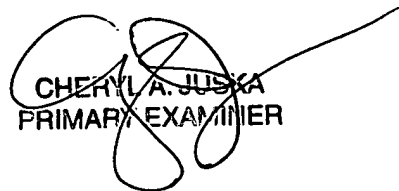
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHERYL A. JUSKA
PRIMARY EXAMINER